

ABSTRACT

Background

Cardiogenic shock is characterised by inadequate tissue perfusion because of cardiac dysfunction. Despite advancements mortality remains around 40 to 70%. Trials have shown that Hs-CRP proved to be an independent predictor of all-cause mortality following acute STEMI. C Reactive Protein is Pentraxin produced predominantly in liver as part of acute phase response. Provides a stable biomarker for low grade inflammation

Methods

Main objective of this study is to identify patients at high risk of developing cardiogenic shock and thus helps in early transfer of patients before hemodynamic instability, and to predict outcome by using biomarkers like HsCRP. The population of our prospective study consists of 50 patients admitted to intensive care unit of Tirunelveli medical college from March 2016 to July 2017 with acute coronary syndrome, who developed cardiogenic shock later.

Results

Results showed that older diabetic female with anterior wall myocardial infarction are at risk of developing cardiogenic shock. Significant association exists between prognosis, ejection fraction and TIMI score with HsCRP. Mean HsCRP of died patients was 10.32 (p=0.001) while mean ejection fraction was 26.5%. Mean HsCRP of diabetic patients was 8.32 (p=0.034) and overall mortality rate was 24%. Inappropriately low mortality rate may be due to short follow up period. Study also showed association of HsCRP with clinically relevant endpoints in the setting of cardiogenic shock following acute coronary syndrome.

Conclusion

HsCRP proved to be an independent predictor of all-cause mortality following cardiogenic shock. Elderly diabetic female with anterior wall myocardial infarction have high chance of developing cardiogenic shock. The normal or basal values of HsCRP are likely higher in the Indian population. Study would be useful to find out high risk individuals and helps in early transfer of patients to tertiary care centre

Key words: cardiogenic shock, acute coronary syndrome, HsCRP, Diabetes mellitus, Myocardial infarction, Ejection fraction, TIMI score

